

REMARKS

Claims 1-12 are pending in the above-identified application. Claims 1-4 and 6-12 were rejected under 35 U.S.C. § 102. Claims 1 and 2 were also rejected under § 103. Claim 5 was objected to but otherwise was indicated to contain allowable subject matter. Claim 5 has been amended to overcome the objection and now should be in condition for allowance. Claim 6 was rejected under 35 U.S.C. § 112, second paragraph, and has been amended to overcome the rejection. Reexamination, reconsideration, and allowance of claims 1-12 of the application is respectfully requested.

Rejections under 35 U.S.C. § 102

A. *Stary*

Claims 1 and 7 were rejected under 35 U.S.C. § 102(b) over U.S. Patent No. 5,160,118 (“*Stary*”). Applicant traverses this rejection.

Independent claim 1 specifically claims a method for the production of a reinforced hollow section including a step of “joining the reinforcing plate to the hollow section”:

1. (Amended) Method for the production of a reinforced hollow section with a continuous periphery, comprising the steps of:

forming an opening in said periphery,

inserting a reinforcing plate into the opening, such
that it at least projects into the hollow section; and
joining the reinforcing plate to the hollow section in
the region of an edge of the opening.

Stary fails to disclose this limitation and thus fails to disclose every limitation of claim 1, and thus does not anticipate claim 1.

Instead of a method for production of a reinforced hollow section (useful, for example, in the production of automobile components), *Stary* discloses a pipeline valve apparatus. The valve apparatus includes a valve body 12, valve disk 30, and T-seal 34. In one embodiment, as shown in FIG. 6A, the disk 30 includes:

four recesses or couplings pads 50, . . . with two recesses
or coupling pads adjacent to each tongue 52 and 53.
Between each pair of recesses or coupling pads 50 is a
reinforcement plate 51 which strengthens the disk at
the location of the recesses or coupling pads 50.

(See Col. 9, lines 24-32.) The Examiner apparently equates reinforcement plate 51 with the recited “reinforcing plate” of claim 1, and equates valve body 12 with a “hollow section”. Even accepting this interpretation, for argument’s sake, *Stary* does not disclose “joining” reinforcement plate 51 with valve body 12. Rather, reinforcement plate 51 merely “strengthens the disk at the location of the recesses or coupling pads 50”.

In addition to all the limitations of Claim 1, dependent Claim 7 further recites:

wherein the hollow section is pierced at a point where the reinforcing plate rests against an inner side of the hollow section, and the plate is joined to the hollow section through said point by plug welding.

The Examiner suggests the *Stary* reinforcement plate 51 is joined to valve body 12 by plug welding. Office Action, p. 3. In fact, *Stary* merely refers to “plug welds” in the context of forming the valve disk 30 from two halves:

Alternatively, the larger disks can be constructed as two halves, secured together with a plurality of fasteners or pins and plug welds . . .

(See Col. 2, lines 50-53.) As a result, *Stary* fails to disclose all the limitations of claim 7 and thus does not anticipate claim 7.

B. *Sanda*

Claims 1 and 9 were rejected under 35 U.S.C. § 102(b) over U.S. Patent No. 5,106,031 (“*Sanda*”). Applicant traverses this rejection.

Sanda relates to a reel for winding metallic wire. The reel comprises a winding drum 2 with a flange 1 connected at either end, as illustrated in FIG. 2 (see col. 2, lines 27-31). The flange 1 includes an inwardly bulged section 1a and hollow

radial reinforcing ribs 1b protruding axially of the flange (see col. 1, lines 29-39 and 55-60).

Independent claim 1 specifically recites the production of a reinforced “hollow section with a continuous periphery” which first involves forming an opening in the periphery followed by inserting a reinforcing plate. The Examiner suggests winding drum 2 is a hollow section with a continuous periphery. Even accepting this interpretation, for argument’s sake, *Sanda* does not disclose or otherwise teach “forming an opening” in the periphery into which a reinforcing plate can be inserted (or the subsequent limitations). Rather, *Sanda* merely shows that open ends of the drum 2 are capped off with flanges.

Since *Sanda* fails to disclose this limitation and thus fails to disclose every limitation of claim 1, *Sanda* does not anticipate claim 1. Since claim 9 depends from claim 1, and includes all the limitations of claim 1, *Sanda* likewise does not anticipate claim 9.

C. Katsuda

Claims 1, 3, 4 and 8-10 were rejected under 35 U.S.C. § 102(b) over a U.S. Patent to “Katsuda” (the patent number provided corresponded to the Schulze document). As confirmed by applicant’s counsel with the Examiner via voicemail, this rejection was made in error and no such document is being asserted against this application.

D. Hall

Claims 1, 3, 6 and 8 were rejected under 35 U.S.C. § 102(b) over U.S. Patent No. 6,296,330 ("*Hall*"). Applicant traverses this rejection.

Hall relates to a crawler web for crawler belts of crawler vehicles, like ski slope vehicles (*see* col. 1, lines 51-57). The crawler web 1, which can be attached to the bands 27 of a crawler belt, comprises a body 2 with a cutting edge 3. (*see* col. 3, lines 56-62 and col. 4, lines 6-8). The body 2 includes side legs 5 and 6 connected together with connecting web 7.

Independent claim 1 specifically recites the production of a reinforced "hollow section with a continuous periphery" which first involves forming an opening in the periphery followed by inserting a reinforcing plate. The Examiner suggests body 2 is a hollow section. Even accepting this interpretation, for argument's sake, *Hall* does not disclose or otherwise teach "forming an opening" in a "continuous periphery" into which a reinforcing plate can be inserted. Rather, *Hall* merely shows a cross sectional body 2 which can receive a cutting edge 3.

Since *Hall* fails to disclose this limitation and thus fails to disclose every limitation of claim 1, *Hall* does not anticipate claim 1. Since claims 3, 6, and 8 depend from claim 1, and include all the limitations of claim 1, *Hall* likewise does not anticipate claims 3, 6, and 8.

E. *Schulze*

Claims 1, 3, 11 and 12 were rejected under 35 U.S.C. § 102(b) over U.S. Patent No. 6,134,767 ("*Schulze*"). Applicant traverses this rejection.

Schulze relates to a method of embedding connection elements in a "wall" (*i.e.*, a piece of sheet metal 2) using an internal-high-pressure deformation tool 10. *Schulze* does not discuss reinforcing or otherwise strengthening hollow components as found in applicant's application.

The Examiner suggests the recited "hollow section with a continuous periphery" of claim 1 reads on wall 2, citing to two lengthy passages in *Schulze* (column 3, line 64 to column 4, line 23, and all of column 5). Contrary to these passages, wall 2 is not hollow and it is not a "hollow section". However, considering the *Schulze* disclosure in its entirety, it is more important to note that the connection elements (14, 34, 50) are not a "reinforcing plate" as recited in the claims. The passages cited in the Office Action do not disclose or otherwise teach that connection elements are used to or in any way reinforce a hollow section.

The Office Action argues that a *Schulze* connection element is a reinforcing plate because it "may be any shape including plates (flanges, col. 4 line 64 – col. 8 line 20 comprises a flanged portion (27) which is bent and partially overlaps the edge of the opening." Not only does the cited passage – which spans over five columns – not support the proposition, but *Schulze* does not use odd-numbered reference numbers and does not disclose that connection elements (14, 34, 50) comprise a flange.

Since *Schulze* fails to disclose these limitations and thus fails to disclose every limitation of claim 1, *Schulze* does not anticipate claim 1. Since claims 3, 11, and 12 depend from claim 1, and include all the limitations of claim 1, *Schulze* likewise does not anticipate claims 3, 11, and 12.

Rejections under 35 U.S.C. § 103

A. *Wycech*

Claims 1 and 2 were rejected under 35 U.S.C. § 103 over U.S. Patent No. 4,769,391 (“*Wycech*”). Applicant traverses this rejection.

Wycech discloses a “precast reinforcement insert for structural members” made of “a plurality of pellets formed of a thermosetting polymeric resin and a blowing agent” (col. 2, lines 30-35). A method disclosed in *Wycech* involves “reinforcing a hollow structural member” by “placing a precast composite plastic insert” into the structural member (col. 2, lines 51-54). However, *Wycech* does not disclose, teach, or otherwise appreciate a method of forming an opening in a “hollow section with a continuous periphery” followed by inserting a “reinforcing plate”. Indeed, the examiner concedes that structural member 12 is not a “hollow section with a continuous periphery”. According to *Wycech*, a precast insert 10 is prepared for structural member 12 by “filling a mold cavity of a die with a plurality of pellets” which are then heated and expanded to fill the cavity (col. 2, line 65 – col. 3, line 6). A stated advantage of *Wycech* is that the precast insert will “expand to fully fill a portion of the structural member” (col. 3, lines 26-34). This teaching of a precast

insert fully filling the structural member is inconsistent with and teaches away from the claimed invention. Moreover, there is no motivation in *Wycech* for a structural member with a continuous periphery.

Since *Wycech* fails to disclose or teach these limitations and thus fails to disclose or teach every limitation of claim 1, *Wycech* does not render obvious claim 1. Since claim 2 depends from claim 1, and includes all the limitations of claim 1, *Wycech* likewise does not render obvious claim 2.

B. *Schulze*

Claim 2 was rejected under 35 U.S.C. § 103 over *Schulze*. Applicant traverses this rejection.

Claim 2 recites that:

beads are stamped into the reinforcing plate before
insertion into the opening.

Claim 2 depends from Claim 1 and thus includes all the limitations of Claim 1. As discussed above, *Schulze* does not disclose or otherwise teach a “hollow section with a continuous periphery” into which a “reinforcing plate” is inserted as recited in Claim 1. *Schulze* merely teaches adding connection elements to a sheet metal wall.

Since *Schulze* fails to disclose or teach these limitations and thus fails to disclose or teach every limitation of claim 1, *Wycech* does not anticipate or render obvious claim 1. Since claim 2 depends from claim 1, and includes all the limitations of claim 1, *Wycech* likewise does not render obvious claim 2.

CONCLUSION


For the reasons stated above, it is respectfully requested that Claims 1-12 be allowed.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #225/50037).

Respectfully submitted,

January 8, 2002



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MARKED-UP VERSION SHOWING CHANGES MADE

IN THE CLAIMS

1. (Amended) Method for the production of a reinforced hollow section [sections] with a continuous periphery, comprising the steps of:

forming an opening in said periphery,

inserting a reinforcing plate into the opening, such that it at least projects into the hollow section; and

joining the reinforcing plate to the hollow section in the region of an edge of the opening.

5. (Amended) Method for the production of a reinforced hollow section with a continuous periphery, comprising the steps of:

forming an opening in said periphery,

inserting a reinforcing plate into the opening, such that it at least projects into the hollow section; and

joining the reinforcing plate to the hollow section in the region of an edge of the opening,

wherein the dimensions of the reinforcing plate are designed in such a way that, when the reinforcing plate is inserted into the opening, it comes to rest against an opposite inner side of the hollow section, and, in addition to being joined to the edge of the opening, the reinforcing plate is also joined to said inner side,

wherein the reinforcing plate is designed as a U- or V- section, and a projection is stamped into the bottom of the section, said projection being the only part to make contact with the inner side of the hollow section when an section is inserted into the opening, and the contact on the inside is made by projection welding.

wherein the section is inserted by means of a punch surrounded by the sides of the section, the punch simultaneously forming a welding electrode for the projection welding.

6. (Amended) The method according to Claim 1, wherein the reinforcing plate is joined to the inner side of the hollow section in the form of a U- or V- section by [Tox] Tox® clinching.